Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 6/14/11 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: http://www.swr.noaa.gov/ocap/doss.htm

DWR: Andy Chu, Mike Ford, Angela Llaban, Cynthia LeDoux-Bloom, Edmund Yu, Dan Yamanaka, **FWS**: Roger Guinee, Nick Hindman, Craig Anderson, **NMFS**: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart, Garwin Yip, **Reclamation:** Thuy Washburn, Josh Israel, **DFG:** Dan Kratville
EPA, **SWRCB:** not present

Note: The internet address has changed (see above). Please update your records.

Byrne provided a synopsis of the discussion from last week and any decisions.

Action Items:

1) **FWS (Brandes) and Reclamation (Israel)** will discuss the issue of data reporting protocols and consistency after the conference call and try to come up with a plan to make the data reports more consistent. **Carry**

2) **DOSS (Byrne)** will add the data reporting protocols and consistency issue to the list of data needs that has been circulated; that is, to have DFG and FWS coordinate on data reporting. A draft worksheet will be sent to the agencies to ask whether they would agree to use it.

3) **DOSS** will consider the DCC gate closure plan and provide advice by fall 2011. **Carry**

4) **Chu** will contact Joe Johnson at DFG to find out whether DWR is involved in the DCC closure plan that was presented. **Carry**

5) **Byrne** will make final changes to the I:E Implementation Plan and send the final document to the DOSS group.

6) **Byrne/Oppenheim** will finalize the fish monitoring spreadsheet and distribute it to the DOSS group.

Agenda

1) Fish monitoring data
2) Current operations
3) Carryover items
4) DCC gate closure plan
5) Next meeting schedule
6) Reports for annual review

Fish Monitoring: The following table presents the fish monitoring data from 6/6 to 6/13/11. For additional info: http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm

Location	Chipps Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST	Moulton Weir RST
Sample Date	6/6, 8, 10	6/6, 6/9	6/6–6/13	6/6-6/10	6/4, 6, 8, 10, 13	6/3, 6, 8, 10, 13	N/A
Total Catch	**388**	**103**	**610**	**9,859**	**6**	**3**	
FR	341	101	572	54	6	3	
LFR							
WR							
SR	1						
(Ad-clips)	45	2	38	2			
DS	1			1			
LFS							
SPTL				9,801			
SH (ad-clip)				1 (ACT)			
SH (natural)							
Water Temp. (avg. °F)	61.5	58.5	N/A	61.5	62.8	60.1	
Flows (avg. cfs)					20,078	19,320	
Turbidity (avg. NTU)					22.4	17.3	
FR/SR Avg. CPUE					0.3	0.13	
WR/LFR Avg. CPUE					0	0	

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail, ACT = acoustical tag

Tisdale: Not much activity at Tisdale. Tisdale will sample the entire year.

Knights Landing: Knights Landing will trap until the end of June.

Mossdale: The 35 coded-wire tagged fish were released "in river"; there is sometimes no other information on these releases provided to the facilities. The majority of Chinook salmon entering the Delta are from the San Joaquin River instead of the Sacramento River at this time of year. There is a certain level of concern fish emigration because Vernalis flows are going to increase and there is more inflow into the reservoirs (potentially more Chinook to come). Snowmelt will increase the flows.

Chinook salmon 6/6–6/12/11

Loss*	CVP	SWP
Winter-run	0	0
Spring-run	184	1,410
Fall-run	1,535	8,023
Late fall-run	0	0

*non-clipped Chinook

Chinook Loss Density 6/6 – 6/12/11 (non-clipped): There were no older juvenile salmon reported salvaged, therefore the loss density remains at zero.

Coded Wire Tags: There are 178 unread tags, 15 were in the winter-run category the rest are fall- or spring-run size. The spring-run Chinook surrogate release numbers have not changed. As of today there have been no hatchery winter-run reported at the fish facilities. A majority of the CWTs being observed at the fish facilities right now are fall-run from the Merced River Hatchery on the San Joaquin River (see DWR graph "Observed Chinook Salvage at the SWP and CVP for this week).

SWP & CVP WILD STEELHEAD LOSS & LOSS DENSITY
06/06/2011 through 06/12/2011

Date	WILD STEELHEAD LOSS* (# fish) SWP	CVP	Combined	Combined wild steelhead loss density Loss Density (fish/TAF)
6/6/2011	0.00	6.12	6.12	0.31
6/7/2011	34.64	0.00	34.64	1.80
6/8/2011	43.30	0.00	43.30	2.39
6/9/2011	17.32	0.00	17.32	0.98
6/10/2011	0.00	0.00	0.00	0.00
6/11/2011	25.98	0.00	25.98	1.48
6/12/2011	138.56	0.00	138.56	8.79

DWR-DES 6/13/2011
Preliminary, subject to revision
*SWP loss = salvage * 4.33, CVP loss = salvage * 0.68

Steelhead Loss Density: The OMR trigger for steelhead was exceeded with a loss density of 8.79 fish/TAF. NMFS was notified on Monday and advised WOMT to target OMR flows of no more negative than -3,500 cfs beginning Wednesday 6/15, which is the last day of the requirement in the NMFS BiOp. The loss density of 8.79 fish/TAF was based on catching only 3 steelhead at the SWP. Exports at the Banks Pumping Plant needed to be reduced from 6,000 to about 5,000 cfs on Sunday (6/12), which may have increased the steelhead density number. Clifton Court ran into some water-level issues because of the low tide. Water levels at Clifton Court have been low (1.5 feet below sea level) and with the low tide outside Clifton Court (elevation must be higher than inside), the ability to bring in water is decreased even though the pumping stays the same. This could have affected the density calculations but it could also have resulted in take of more fish. If water levels drop too low, the pumps can be damaged from cavitation.

Green Sturgeon: Four juveniles were reported salvaged, for an expansion of 48, plus the expanded salvage of 2 earlier in the year for a total of 50 for the year, or about 2/3 of the take limit (74/year). NMFS anticipated a loss of 106 to 110 juveniles annually in the BiOp, however, there is no calculation for sturgeon loss rates. DOSS is concerned that when pumping increases and using the current expansion of salvage, the incidental take limit may be reached very soon (6 more fish). The take limit is subject to review every 5 years; the last review was in 2006 so it should be this year. It is useful, then, that DOSS tries to re-assess the take limit and what take is assumed for this year based on real number and referencing the "take statement" in the BiOp.

Take limits: There was a discussion regarding the sturgeon take limit and how it is calculated. We should specify that it is salvage, not loss. There is a draft document (DWR) out to clarify this but it has not yet been finalized (see pg. 777 in NMFS BiOp on incidental take). Take would increase with wet year conditions (higher flows) so the take limit should be adjusted accordingly depending on that increase. The expansion rate changed from 30-minute counts to 10-minute counts recently but then went back to 30-minute counts beginning Monday (6/13). This change also makes it difficult to compare data. The 30-minute counts are multiplied by 4; 10-minute counts are multiplied by 12 to get the expanded number. Should DOSS look into this year's projected take? DOSS members were asked to think more about this and discuss it at upcoming meetings.

Oppenheim requested the Tracy biologists verify the identification of the green sturgeon caught because they were so small (<148 mm). Photos were taken of 3 of the sturgeon and DNA samples were sent to UC, Davis (Cramer Fish Sciences), for verification. It is difficult to tell whether they are white or green sturgeon at this point because of their small size. Those sampled at the CVP were not typical of the average size observed; green sturgeon usually average 300 mm or larger in the salvage data. The DNA tests should take only about 48–72 hours; however, depending on the workload, it may be a few weeks.

There was a question about estimating the age of sturgeon by size. Generally, a sturgeon at 60 mm would be about 4–6 weeks old; 100 mm would be about 8 weeks old, so these juveniles would be from this year. It is surprising that these sturgeon are getting to the south Delta so quickly. It is possible that the sturgeon this small are able to get through the louvers and not be counted; however the typical larger sturgeon (average 330 mm in size) would continue on to the bypass and be counted. This makes the data difficult because the presence or absence of sturgeon tends to then be size dependent.

Advice: The DOSS group noted the salvage data but provided no advice regarding the green sturgeon.

Smelt working group (SWG) update: SWG notes are posted on the FWS website at: http://www.fws.gov/sfbaydelta/ocap/

SWG had a meeting on Monday (6/13); there was no recommendation. One larval delta smelt was salvaged a week ago. All trawls indicate that delta smelt are in the western Delta and down in Suisun Bay. The SWG will have another phone meeting on Thursday (6/16) due to the NMFS RPA Actions IV.2.2 and IV.2.3 ending June 15. The larval smelt trigger at the facilities is 958 for fish < 20 mm for June (concern level); 1,436 is the take limit. The SWG will discuss the OMR flows on Thursday.

Operations (June 14, 2011)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	6,000	Jones Pumping Plant	3,000
Reservoir releases			
Feather - Oroville	9,000	American - Nimbus	10,000
		Sacramento - Keswick	13,000
		Stanislaus - Goodwin	10,000
Reservoir Storage (TAF)			
San Luis (SWP)	959	San Luis (CVP)	909
Oroville	3,509	Shasta	4,437
		Folsom	908
		New Melones	
Delta Operations			
DCC	Closed	Sacramento River at Freeport	45,782
Outflow Index (cfs)	~47,600	San Joaquin at Vernalis	11,283
Total Delta Inflow	60,445	OMR (daily)	
Water Temperature (°F)	66.7	OMR 5 day	-3,366
X2 (km)	<81	OMR 14 day	-2,677
E/I	16.2		

OMR: OMR has been ~-3,500 cfs since last Wednesday (6/8). Some of the flow data are missing over the weekend, so DWR will need to get confirmation on that.

San Luis Reservoir (SWP side) is still in the "fill" mode at about 2–3,000 AF/day.

Vernalis flows are still around 11, 283 cfs (6/13). The I:E ratio = 1.2

DCC will remain closed until flows drop below 25,000 cfs at Freeport.

CVP has reduced pumping from 4,200 to 3,000 cfs for a CVPIA b(2) action to protect fall-run Chinook emigrating from the San Joaquin River (former shoulder on VAMP). This 2-week action will continue until 6/22.

DOSS advice to WOMT and NMFS: There was no advice this week, just a status update on exceeding the steelhead OMR trigger for one day, which would require no operational changes since the current OMR flow is more positive than the -3,500 cfs flow requirement under Action 4.2.3. June 15 (Wednesday) is the last day for compliance with the OMR action; therefore, the action would only be met for one of the five days required.

Meeting Hiatus: There are not a lot of requirements to monitor throughout the summer. DOSS normally takes a break after 6/15. We will meet on 6/21 to close out the season. During this hiatus, DOSS needs to begin preparing the annual review notes.

Next Meeting: Conference call on Tuesday, 6/21/11, 9:00 a.m.